



Docket No. 2458-4042US2

DT14 Rec'd PCT/PTO 11 2 JUN 2003

**UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): DENTON, et al.

Group Art Unit: TBA

Serial No.: 10/019,242

Examiner: TBA

Filed: December 21, 2001

For: METHODS FOR OBTAINING AND USING HAPLOTYPE DATA

**INFORMATION DISCLOSURE STATEMENT**

Mail Stop \_\_\_\_\_  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Information Disclosure Statement is filed in accordance with 37 C.F.R. §§1.56, 1.97 and 1.98. The items listed on Form PTO-1449, a copy of which is enclosed, are made of record to assist the Patent and Trademark Office in its examination of this application. The Examiner is respectfully requested to fully consider the items and to independently ascertain their teaching.

1. ☐ For each of the following items listed on the enclosed copy of Form PTO-1449 that is not in the English language, an English language translation of that item or a portion thereof or a concise explanation of the relevance of that item is enclosed:
2. ☐ For each of the following items listed on the enclosed copy of Form PTO-1449 that is not in the English language, a concise explanation of the relevance of that item is incorporated in the specification of the above-identified application.
3. ☐ Any copy of the items listed on the enclosed copy of Form PTO-1449 that is not enclosed with this Information Disclosure Statement was previously cited by or submitted to the Patent and Trademark Office in application Serial No. \_\_\_\_\_, filed \_\_\_\_\_.
4. ☒ No fee is due under 37 C.F.R. §1.17(p) for this Information Disclosure Statement since it is being filed in compliance with:  
☐ 37 C.F.R. §1.97(b)(1), within three months of the filing date of a national application other than a CPA; or

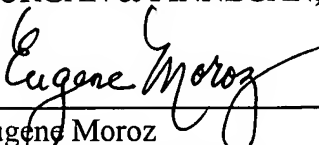
- ☐ 37 C.F.R. §1.97(b)(2), within three months of the date of entry into the national stage as set forth in §1.491 in an international application; or
- ☒ 37 C.F.R. §1.97(b)(3), before the mailing date of a first Office action on the merits; or
- ☐ 37 C.F.R. §1.97(b)(4) before the mailing date of a first office action after the filing of an RCE under §1.114.
5. ☐ No fee is due under 37 C.F.R. §1.17(p) for this Information Disclosure Statement since it is being filed in compliance with 37 C.F.R. §1.97(c), after the period specified in paragraph 4 above but before the mailing date of a final action or a Notice of Allowance (where there has been no prior final action), and is accompanied by one of the certifications pursuant to 37 C.F.R. §1.97(e) set forth in paragraph 9 below.
6. ☐ A fee is due under 37 C.F.R. §1.17(p) for this Information Disclosure Statement since it is being filed in compliance with 37 C.F.R. §1.97(c), after the period specified in paragraph 4 above but before the mailing date of a final action or a notice of allowance (where there has been no prior final action):
- ☐ A check in the amount of \$180.00 is enclosed in payment of the fee.
- ☐ Charge the fee to Deposit Account No. 13-4500, Order No. \_\_\_\_\_. A  
DUPLICATE COPY OF THIS SHEET IS ATTACHED.
7. ☐ A fee is due under 37 C.F.R. §1.17(p) for this Information Disclosure Statement since it is being filed in compliance with 37 C.F.R. §1.97(d), after the mailing date of a final action or a notice of allowance, whichever comes first, but before payment of the issue fee, and is accompanied by:
- a. one of the certifications pursuant to 37 C.F.R. §1.97(e) set forth in paragraph 9 below; and
- b. the fee due under 37 C.F.R. §1.17(p) which is paid as set forth in paragraph 11 below.
8. ☐ This Information Disclosure Statement is being filed in compliance with:
- a. ☐ 37 C.F.R. §1.313(b)(3) or §1.313(c)(1), after the issue fee has been paid and information cited in this Information Disclosure Statement may render at least one claim unpatentable and is accompanied by the attached Petition To Withdraw Application From Issue and fee pursuant to 37 C.F.R. §1.17(h);
- b. ☐ 37 C.F.R. §1.313(c)(2) or §1.313(c)(3), after the issue fee has been paid and information cited in this Information Disclosure Statement is to be considered in a Request for Continued Examination (RCE) or a Continuation application upon abandonment of the instant application and is accompanied by the attached Petition To Withdraw Application From Issue and fee pursuant to 37 C.F.R. §1.17(h).
- c. ☐ The fee due under 37 C.F.R. §1.17(h) is paid as set forth in paragraph 11

below.

9. ☐ I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.
- ☐ I hereby certify that no item of information in the Information Disclosure Statement filed herewith was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of this Information Disclosure Statement.
10. ☐ This document is accompanied by ☐ a Search Report ☐ Communication which was cited in a corresponding ☐ PCT or ☐ Foreign counterpart application
11. ☐ A check in the amount of \$ \_\_\_\_\_ is enclosed in payment of the fees due under 37 C.F.R. §§1.17(h) and 1.17(p).
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- ☒ The Commissioner is hereby authorized to charge any additional fees which may be required for this Information Disclosure Statement, or credit any overpayment to Deposit Account No. 13-4500, Order No. 2458-4042US2. A DUPLICATE COPY OF THIS SHEET IS ATTACHED.

Respectfully submitted,  
MORGAN & FINNEGAN, L.L.P.

By:

  
\_\_\_\_\_  
Eugene Moroz  
Registration No. 25,237

Dated: June 10, 2003

Correspondence Address:

MORGAN & FINNEGAN, L.L.P.  
345 Park Avenue  
New York, NY 10154-0053  
(212) 758-4800 Telephone  
(212) 751-6849 Facsimile

below.

9. ☐ I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.
- ☐ I hereby certify that no item of information in the Information Disclosure Statement filed herewith was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of this Information Disclosure Statement.
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345 Park Avenue  
New York, NY 10154-0053  
(212) 758-4800 Telephone  
(212) 751-6849 Facsimile

<b>FORM PTO-1449</b>  <b>INFORMATION DISCLOSURE CITATION</b>	Attorney Docket: 2458-4042US2	Serial No.: 10/019,242
	Applicant: DENTON, et al.	
	Filing Date: December 21, 2001	Group Art Unit: TBA

## U.S. PATENT DOCUMENTS

Examiner Initial	Patent Number	Publication Date	Name	Class	Sub-Class	Filing Date
-	5,966,711	10/12/1999	Adams			
-	6,043,040	03/28/2000	Acton			
-	6,030,778	02/29/2000	Acton et al.			
	6,223,128 B1	4/24/2001	Allex et al.			
	5,121,320	6/9/1992	Aoki et al.			
	6,222,559 B1	4/24/2001	Asano et al.			
	6,185,561 B1	2/6/2001	Balaban et al.			
	6,081,786	06/27/2000	Barry et al.			
	6,188,988	02/13/2001	Barry et al.			
	5,874,256	02/23/1999	Bertina et al.			
-	5,866,404	2/2/1999	Bradshaw et al.			
	6,020,126	2/1/2000	Carlsson et al.			
-	6,219,674	04/17/2001	Classen			
	5,773,220	06/30/2000	Dekosky et al.			
	5,811,239	09/22/1998	Frayne			
	5,912,120	06/15/1999	Goldstein et al.			
	5,891,633	04/06/1999	Gonzalez et al.			
	5,297,288	3/22/1994	Hemminger et al.			
	5,762,876	6/9/1998	Lincoln et al.			
	5,811,235	09/22/1998	Jeffreys			
-	5,853,989	12/29/1998	Jeffreys et al.			
	6,094,626	7/25/2000	Kephart et al.			
	5,361,351	11/1/1994	Lenkov et al.			
	5,953,727	9/14/1999	Maslyn et al.			
	6,189,013 B1	2/13/2001	Maslyn et al.			
	6,175,830 B1	1/16/2001	Maynard			
	5,648,482	07/15/1997	Meyer			
	4,706,192	11/10/1987	Nasu et al.			
	6,214,556 B1	4/10/2001	Olek et al.			
	5,561,754	10/1/1996	Oliver et al.			
	5,559,944	9/24/1996	Ono			
	5,834,183	11/10/1998	Orr et al.			
	5,876,933	03/02/1999	Perlin			
-	5,632,041	5/20/1997	Peterson et al.			
	6,022,683	02/08/2000	Poirer			
	5,862,304	1/19/1999	Ravdin et al.			
	6,178,382	01/23/2001	Roederer et al.			
	6,141,657	10/31/2000	Rothberg et al.			
	5,972,614	10/26/1999	Ruano et al.			
	5,970,500	10/19/1999	Sabatini et al.			
	5,966,712	10/12/1999	Sabatini et al.			

Examiner	Date Considered
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP §609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.	

<b>FORM PTO-1449</b>  <b>INFORMATION DISCLOSURE CITATION</b>	Attorney Docket: 2458-4042US2	Serial No.: 10/019,242
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	5,972,604	10/26/1999	Santamaria et al			
	5,858,659	01/12/1999	Sapolsky et al.			
	5,187,775	2/16/1993	Schroeder et al.			
	5,867,402	2/2/1999	Schneider et al.			
	6,023,659	2/8/2000	Seilhamer et al.			
	5,096,557	03/17/1992	Simons			
	5,192,659	03/09/1993	Simons			
	5,612,179	03/18/1997	Simons			
	5,789,568	08/04/1998	Simons			
	5,851,762	12/22/1998	Simons			
	5,724,253	3/3/1998	Skovira			
	5,834,189	11/10/1998	Stevens et al.			
	5,618,672	4/8/1997	Stodola et al.			
	5,885,776	03/23/1999	Stone et al.			
	5,502,773	3/26/1996	Tibbetts et al.			

### FOREIGN PATENT DOCUMENTS

Examiner Initial	Patent Number	Publication Date	Country	Class	Sub-Class	Translation
	WO 87/02802	5/7/1987	PCT			<input type="checkbox"/> Yes <input type="checkbox"/> No
	WO 91/05302	4/18/1991	PCT			<input type="checkbox"/> Yes <input type="checkbox"/> No
	WO 92/01066	1/23/1992	PCT			<input type="checkbox"/> Yes <input type="checkbox"/> No
	WO 95/17524	6/29/1995	PCT			<input type="checkbox"/> Yes <input type="checkbox"/> No
	WO 95/10805	4/20/1995	PCT			<input type="checkbox"/> Yes <input type="checkbox"/> No
	WO 97/40462	10/30/1997	PCT			<input type="checkbox"/> Yes <input type="checkbox"/> No
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	WO 99/11822	3/11/1999	PCT			<input type="checkbox"/> Yes <input type="checkbox"/> No
	WO 99/54500	10/28/1999	PCT			<input type="checkbox"/> Yes <input type="checkbox"/> No
	WO 99/57308					<input type="checkbox"/> Yes <input type="checkbox"/> No
	WO 99/64626	12/16/1999	PCT			<input type="checkbox"/> Yes <input type="checkbox"/> No
	WO 99/64627	12/16/1999	PCT			<input type="checkbox"/> Yes <input type="checkbox"/> No
	WO 00/33161	06/08/2000	PCT			<input type="checkbox"/> Yes <input type="checkbox"/> No
	WO 00/50639A2 (cd format)		PCT			<input type="checkbox"/> Yes <input type="checkbox"/> No
	WO 00/50639A3 (cd format)		PCT			<input type="checkbox"/> Yes <input type="checkbox"/> No
	WO 01/91026	11/29/2001	PCT			<input type="checkbox"/> Yes <input type="checkbox"/> No
	WO 02/064617	08/22/2002	PCT			<input type="checkbox"/> Yes <input type="checkbox"/> No
	EP 0245466B1	5/25/1994	EP			<input type="checkbox"/> Yes <input type="checkbox"/> No
	EP 0336560A2	10/11/1989	EP			<input type="checkbox"/> Yes <input type="checkbox"/> No
	EP 0336560A3	10/11/1989	EP			<input type="checkbox"/> Yes <input type="checkbox"/> No
	EP 0336560B1	11/30/1994	EP			<input type="checkbox"/> Yes <input type="checkbox"/> No
	EP 0404682A2	12/27/1990	EP			<input type="checkbox"/> Yes <input type="checkbox"/> No
	EP 0404682B1	12/27/1990	EP			<input type="checkbox"/> Yes <input type="checkbox"/> No

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	EP 0408188A2	1/16/1991	EP			<input type="checkbox"/> Yes <input type="checkbox"/> No
	EP 0408188A3	1/16/1991	EP			<input type="checkbox"/> Yes <input type="checkbox"/> No
	EP 0408188B1	1/16/1991	EP			<input type="checkbox"/> Yes <input type="checkbox"/> No
	EP 0449494A2	10/2/1991	EP			<input type="checkbox"/> Yes <input type="checkbox"/> No
	EP 0449494A3	10/2/1991	EP			<input type="checkbox"/> Yes <input type="checkbox"/> No
	EP 0449494B1	8/25/1999	EP			<input type="checkbox"/> Yes <input type="checkbox"/> No
	EP 0474944A2	3/18/1992	EP			<input type="checkbox"/> Yes <input type="checkbox"/> No
	EP 0474944B1	7/16/1997	EP			<input type="checkbox"/> Yes <input type="checkbox"/> No
	EP 0481286A2	4/22/1992	EP			<input type="checkbox"/> Yes <input type="checkbox"/> No
	EP 0481286B1	4/9/1997	EP			<input type="checkbox"/> Yes <input type="checkbox"/> No
	EP 0494907B1	5/15/1996	EP			<input type="checkbox"/> Yes <input type="checkbox"/> No
	EP 0612846A1	8/31/1994	EP			<input type="checkbox"/> Yes <input type="checkbox"/> No
	EP 0612846B1	8/16/2000	EP			<input type="checkbox"/> Yes <input type="checkbox"/> No
	EP 0673523B1	2/10/1999	EP			<input type="checkbox"/> Yes <input type="checkbox"/> No
	EP 0812922A2	12/17/1997	EP			<input type="checkbox"/> Yes <input type="checkbox"/> No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, etc.)	
<input checked="" type="checkbox"/>	Beaudet, Arthur L., "1998 ASHG Presidential Address – Making Genomic Medicine a Reality", <u>American Journal of Human Genetics</u> , Vol. 64, pp. 1-13, 1999.
<input checked="" type="checkbox"/>	Carter et al., "Genetic Control of Drug-Induced Recovery from Murine Visceral Leishmaniasis", <u>J. Pharm. Pharmacol.</u> 1994, 45:795-798
<input checked="" type="checkbox"/>	Cashman, Siobhan M. et al., "The Irish Cystic Fibrosis Database", <u>Journal of Medical Genetics</u> , Vol. 32, pp. 972-975, July 1995.
<input checked="" type="checkbox"/>	Chakraborty, R. "A Class of Population Genetic Questions Formulated as the Generalized Occupancy Problem", <u>Genetics</u> , July 1993, 134:953-958
<input checked="" type="checkbox"/>	Chiano et al. "Fine Genetic Mapping Using Haplotype Analysis and the Missing Data Problem", <u>Ann. Hum. Genet.</u> , 1998, 62:55-60.
<input checked="" type="checkbox"/>	Clark, Andrew G. et al., "Haplotype Structure and Population Genetic Inferences From Nucleotide-Sequence Variation in Human Lipoprotein Lipase", <u>American Journal of Human Genetics</u> , Vol. 63, pp. 595-612, 1998.
<input checked="" type="checkbox"/>	Clark, Andrew G. , "Inference of Haplotypes from PCR-amplified Samples of Diploid Populations", <u>Mol. Biol. Evol.</u> , 7(2):111-122, 1990
<input checked="" type="checkbox"/>	Cooper, Gillian et al., "Network Analysis of Human Y Microsatellite Haplotypes", <u>Human Molecular Genetics</u> , Vol. 5, No. 11, pp. 1759-1766, 1996.
<input checked="" type="checkbox"/>	Dempster et al., "Maximum Likelihood from Incomplete Data via the EM Algorithm", <u>J. Statistical Society</u> , Vol. 39, No. 1, pp.1-38, 1977
<input checked="" type="checkbox"/>	Drefus et al. "Etude des Reactions Croisees des Antigenes HLA A et B Chez 63 Patients Atteints de Polyarthrite Rhumatoide", <u>Revue du Rhumatisme</u> , 1984, 51(4), 197-202
<input checked="" type="checkbox"/>	Drysdale, "Complex promoter and coding region beta 2-adrenergic receptor haplotypes alter receptor expression and predict in vivo responsiveness", 2000, <u>Proc. Natl. Acad. Sci.</u> 97(19):10483-8
<input checked="" type="checkbox"/>	Excoffier et al., "Incorporating Genotypes of Relatives into a Test of Linkage Disequilibrium", <u>Am. J. Hum. Genet.</u> , 62:171-180, 1998
<input checked="" type="checkbox"/>	Excoffier et al. "Maximum-Likelihood Estimation of Molecular Haplotype Frequencies in a Diploid Populations", <u>Mol. Biol. Evol.</u> , 1995, 12(5):921-927.
<input checked="" type="checkbox"/>	Fisher, Lloyd D. et al., "Biostatistics: A Methodology for the Health Sciences", pp. 345-495, 692-762, John Wiley & Sons, Inc.

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, etc.)	
	Gene et al., "Haplotype Frequencies of Eight Y-chromosome STR loci in Barcelona (North-East Spain)", <u>International Journal of Legal Medicine</u> , Vol. 112, pp. 403-405, 1999.
	Hartl, Daniel L. et al., "Genetic and Phenotypic Variation", <u>Principles of Population Genetics</u> , pp. 37-109, Singuer Associates, Inc., 3 ed.
	Hawley et al., "HAPLO: A Program Using the EM Algorithm to Estimate the Frequencies of Multi-site Haplotypes", <u>J. of Heredity</u> , 86(5), pp. 409-411, 1995
	Hill et al., "Human Genetic Variation and Its Impact on Public Health and Medicine", pp.62-74
	Hill, "Tests for Association of Gene Frequencies at Several LOCI in Random Mating Diploid Populations", <u>Biometrics</u> , 31, 881-888, 1975
	Hoang, Liem et al., "PAH Mutation Analysis Consortium Database: A Database for Disease-Producing and Other Allelic Variation at the Human PAH Locus", <u>Nucleic Acids Research</u> , Vol. 24, No. 1, pp. 127-131, 1996.
	Jackson et al., "Pharmacokinetic-Pharmacogenetic Modelling in the Detection of Polymorphisms in Xenobiotic Metabolism", 1990, <u>Ann. Occup. Hyg.</u> 34(6):653-662
	Judson et al., "The Predictive Power of Haplotypes in Clinical Response", 2000, pp.1-12
	Judson, Richard, "Genetic Algorithms and Their Use in Chemistry", <u>Reviews in Computational Chemistry</u> , Vol. 10, pp. 1-66, 1997
	Kalow et al., "The Science of Pharmacological Variability: An essay", <u>Clin. Pharma. &amp; Therapeutics</u> , Vol. 66, No. 5, pp.445-447, 1999
	Kardia et al., "An Evolutionary Perspective on the Genetic Architecture of Susceptibility to Cardiovascular Disease", pp.231-245
	Kleyn, Patrick W. et al., "Genetic Variation as a Guide to Drug Development", <u>Science</u> , Vol. 281, pp. 1820-1821, September 18, 1998.
	Kwok et al., "Single Nucleotide Polymorphism Libraries: Why and How are We Building Them?", <u>Mol. Med. Today</u> , 1999, Vol. 5, pp. 538-543
	Layton et al., "The Therapeutic Response to D-Penicillamine in Rheumatoid Arthritis: Influence of Glutathione S-transferase Polymorphisms", <u>Rheumatology</u> , 1999, 38:43-47
	Long et al., "An E-M Algorithm and Testing Strategy for Multiple-Locus Haplotypes", <u>Am. J. Hum. Genet.</u> , 56:799-810, 1995
	MacLean et al., "Estimation of Myriad Haplotype Frequencies", <u>Genetic Epidemiology</u> , 2:263-272, 1985
	Magon, "Pharmacogenetic interactions in G6PD deficiency and development of an in vitro test to predict a drug's hemolytic potential", 1981, <u>Prog. Clin. Biol. Res.</u> , 55:709-24
	Matise, T.C., "Genome Scanning for Complex Disease Genes Using the Transmission / Disequilibrium Test and Haplotype-based Haplotype Relative Risk", <u>Genetic Epidemiology</u> , Vol. 12, pp. 641-645, 1995.
	Meyer, Urs A., "Medically Relevant Genetic Variation of Drug Effects", pp. 41-49
	Michalatos-Beloin et al. "Molecular Haplotyping of Genetic Markers 10 kb Apart by Allele-Specific Long Range PCR", <u>Nucleic Acids Research</u> , 1996, 24(23):4841-4843.
	Mori, Motomi et al., "Computer Program to Predict Likelihood of Finding an HLA-Matched Donor: Methodology, Validation, and Application", <u>Biology of Blood and Marrow Transplantation</u> , Vol 2, pp. 134-144, October 1996.
	Mori, Motomi et al., "HLA Gene and Haplotype Frequencies in the North American Population", <u>Transplantation</u> , Vol. 64, No. 7, pp. 1017-1027, October 15, 1997.
	Neuman et al. "A Bit about Haplotypes: Using Binary Digits to Code Tightly Linked Loci", <u>Hum. Hered.</u> , 1994 44:241-247
	Niu et al., "Bayesian Haplotype Inference for Multiple Linked Single-Nucleotide Polymorphisms", <u>Am. J. Hum. Genet.</u> , 2002, 70:157-169

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**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, etc.)**

	Olsen et al., "Design and Sample-Size Considerations in the Detection of Linkage Disequilibrium with a Disease Locus", <i>Am. J. Hum. Genet.</i> 1994, 55:574-580
	Perlin, Mark et al., "Toward Fully Automated Genotyping: Allele Assignment, Pedigree Construction, Phase Determination, and Recombination Detection in Duchenne Muscular Dystrophy", <i>American Journal of Human Genetics</i> , Vol. 55, pp. 777-787, June 1994.
	Press, William H. et al., "Numerical Recipes in C: The Art of Scientific Computing", pp. 394-455, Cambridge University Press, 2 ed.
	Rich, Elaine et al., "Artificial Intelligence", pp. 514-519, McGraw-Hill, Inc., 2 ed.
	Ruano et al. "Haplotype of Multiple Polymorphisms Resolved by Enzymatic Amplification of Single DNA Molecules", August 1990, <i>Proc. Natl. Acad. Sci.</i> , Vol. 87, pp. 6296-6300
	R & D Directions Staff, "Beyond Genomics", R & D Directions, April 1999 pp. 40-44
	Slatkin et al., "Testing for Linkage Disequilibrium in Genotypic Data Using the Expectation-Maximization Algorithm", <i>Heredity</i> , 76:377-383, 1996
	Staessen et al., "M235T Angiotensinogen Gene Polymorphism And Cardiovascular Renal Risk", <i>J. Hypertension</i> , January 1999, 17(1):9-17.
	J.C. Stephens et al., "Haplotype Variation and Linkage Disequilibrium in 313 Human Genes", <i>Science</i> , 2001
	Stephens, J. Claiborne, "Single-nucleotide Polymorphisms, Haplotypes, and Their Relevance to Pharmacogenetics", <i>Molecular Diagnosis</i> , Vol. 4, No. 4, pp. 309-317, December 1999.
	Stephens et al., "A New Statistical Method for Haplotype Reconstruction from Population Data", <i>Am. J. Hum. Genet.</i> , 2001, 68:978-989
	Thayer, Ann M., "Bioinformatics for the Masses", <i>C&amp;EN</i> , 19-32, 2000
	Tishkoff S. A. et al., "The Accuracy of Statistical Methods for Estimation of Haplotype Frequencies: An Example from the CD4 Locus", <i>American Journal of Human Genetics</i> , Vol 67, pp. 518-522, August 2000.
	Appleby, "Pharmaceutical Labs Exploring Drugs Tailored to Ethnicity, DNA", January 24, 1999, Las Vegas Review - Journal, Section A, p. 26A.
	Birt, "Drugs Industry Predicted to Be 'Microsoft' For the New Millenium", June 1, 1998, Birmingham Post, pg. 29
	"Bursting with Innovation", December 1997, Med Ad News,
	Craig, "Answers for the Toughest Challenges", April 19, 1999; Forbes, Supplement; Special Advertising Section; Biotechnology, page 2.
	Debare, "California Spotlight: Incyte plans to conquer DNA mapping within year; Genetics: Part of the plan is to purchase British firm Hexagen for \$41 million", August 23, 1998, The Orange County Register, pg. K01.
	Furuta, "Race to Unlock Genetic Secrets Heats Up in Japan's Laboratories: Analysis of Genes Could Help Create Tailor-Made Medicines", November 16, 1998, The Nikkei Weekly, pg. 1
	"Genaissance Raises \$10 Million in Private Placement; Accelerates Development of Personalized Medicines Through Pharmacogenomics", August 27, 1998; PR Newswire, Financial News Section
	MacGregor, "Delay is Half The Cure: Nova's Merger With U.S. Firm Steps Up Research Aimed at Postponing Alzheimer's Until It No Longer Matters", March 10, 1999, The Gazette (Montreal), Section D1.
	"Mix/Match Analysis of Gene Diversity in Ethnic Cross-Section Aims at Personalized Medicine", 2001, Bioworld Today, p. 5
	Regalado, "Inventing the Pharmacogenomics Business, Part I", September 1997, In Vivo the Business & Medicine Report, p. 52.
	Sadee, Wolfgang, "Using Genetic Information to Optimize Drug Therapy", Medscape Pharmacotherapy, 2000
	"Terrapin and Genaissance Establish Research and Development Collaboration Targeting Drug Candidates Based on Estrogen Receptor Modulators Identified in Genomics Research", February 12, 1998, Business Wire

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, etc.)	
	The Genesis Group, "Will Pharmacogenomics Create a \$2 Billion Market?", July 1998, Genesis Report, 8(1); pg 26; 1061-2289
	"Valigen Acquires Berlin-Based Infogen and Phenotype Database", 2000, Worldwide Biotech
	"Variagenics, Inc. Acquires Exclusive Rights To Leading Pharmacogenomic Technologies for Neurological Disorders", February 8, 1999, Canada Newswire
	Yasuhara, "Ethnic factors in evaluation of drug efficacy and safety", August 1994, Nippon Yakurigaku Zasshi, 102(2): 67-78 (English Abstract)
	Text of April 17, 2001 press release re: Classen patent No. 6,219,674

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